

REMARKS

This is response to the Office Action of May 8, 2003. Claims 1-20 are pending in the present application. New claims 21 and 22 have been added but no new matter has been introduced by virtue of the new claims. Claims 1-17, 19 and 20 are rejected.

Applicant gratefully acknowledges Examiner's indication that claim 18 would be allowed if rewritten as suggested in the Office Action.

Claims 1-6, 9-14, and 20 are rejected under 35 U.S.C § 103 (a) as being unpatentable over Hwang (U.S. Patent 6,034,539) and Shau (U.S. Patent 6,427,222). The rejections are respectfully traversed.

It is respectfully submitted that at the very minimum, the combination of Hwang and Shau is legally deficient to establish a *prima facie* case of obviousness against claims 1, 9, and 20, because such combination does not disclose or suggest *an electrically isolated pin (e.g. power transmitting pin) that is connected to an option pad, at the package level, much less transmitting a control signal to the option pad via the electrically isolated pin*, as essentially claimed in claims 1, 9, and 20.

The Office Action states that Hwang discloses "a method of transmitting a signal to an option pad of an integrated circuit, comprising the steps of electrically isolating one of commonly connected power pins of the IC, and connecting the pin to the option pad to thereby transmit a control signal from outside through the electrically isolated power pin to the option pad." Applicants respectfully disagree with such contention.

Hwang does not disclose or suggest an electrically isolated power pin that is connected to an option pad. To begin, although Hwang discloses (in Fig.9) an option pad (720), Hwang clearly discloses that such option pad (720) is selectively connected via

bonding entries (740) and (750) to a common power leadframe (780) or a common ground leadframe (790), and that pins (785) and (795) are connected to the common leadframes (780) and (790), respectively (see Col. 7, lines 26-39; Col. 8, lines 3-8). Therefore, it is clear that pins 785 and 795 are not electrically isolated, but rather connected to common leadframes. Indeed, Hwang teaches that the option pad can be selectively connected to either a high-voltage point (such as the system power) or a low-voltage point (such as the ground), so as to set various permanent logic status to the internal circuit. Therefore, Hwang does not teach or suggest an electrically isolated pin that is connected to an option pad, as essentially claimed in claims 1, 9, and 20.

Shau does not cure deficiencies of Hwang in this regard because, although Shau may disclose “pads”, Shau discloses that such pads are accessible at the wafer level. Shau does not remotely teach or suggest power pins used in a package level, much less electrically isolated power pins connected to an option pad.

Further, the combination of Hwang and Shau does not disclose or suggest *transmitting a control signal to an option pad via the electrically isolated power pin*, as essentially claimed in claim 1, 9, and 20. As noted above, Hwang merely discloses selectively connecting power or ground voltage to an option pad to permanently set a logic state, but does not disclose using the option pad for inputting control signals. Furthermore, although Shau discloses pads that are used for inputting control signals for testing, Shau is directed to testing at the wafer-level where all pads are exposed. There is no teaching or suggestion in Shau for testing at package level. In fact, since Shau is directed solely to testing at the wafer level and has absolutely no relation to testing at package level using option pads, it is respectfully submitted that one of ordinary skill in

the art would not be motivated to combine the teachings of Hwang and Shau to arrive at claims 1, 9, and 20.

Accordingly, claims 1, 9, and 20 are believed to be patentable and nonobvious in view of Hwang and Shau because the combination fails to teach or suggest elements of claims 1, 9, and 20. In addition, dependent claims 2-6 and 10-14 are believed to be patentable and non-obvious in view of Hwang and Shau at least for the same reasons as respective base claims 1 and 9.

Claims 7-8, 15-16 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hwang in view of Shau in further view of White (US pat. 5,880,596). Claim 17 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Hwang in view of Shau in further view of Rosenthal (US pat. 5,051,615).

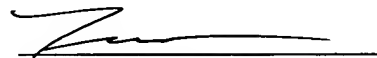
Claims 7-8 depend from claim 1, and claims 15-17 and 19 depend from claim 9. Each of these claim rejections is based, in part, on the rejections of claims 1 or 9, based on the combination of Hwang and Shau. However, as explained above, the combination of Hwang and Shau is legally deficient to establish a *prima facie* case of obviousness against claims 1 and 9. Therefore, the dependent claims 7-8, 15-17, and 19 are believed to be allowable for at least the reasons given for respective base claims 1 or 9.

Accordingly, withdrawal of the rejection of claims under 35 U.S.C. §103 (a) is respectfully requested.

The drawings were objected to under MPEP § 608.02 (g). The examiner has stated that Fig. 1 should be designated by a legend such as "Prior Art." Amended Fig.1 is annexed to the accompanying Request for Approval of Drawing Changes. Therefore, withdrawal of the drawing objections is requested.

In view of the foregoing remarks, it is respectfully submitted that all the claims now pending in the application are in condition for allowance. Early and favorable reconsideration is respectfully requested.

Respectfully submitted,


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